

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. XXXIII. WEDNESDAY, AUGUST 20, 1845.

No. 3.

DR. COALE'S PRIZE DISSERTATION ON FRACTURES.

[Continued from page 35.]

NEARLY contemporary with Gooch was Percival Pott, whom, however, we will only quote upon those points on which he originated some modification of the methods of treating fracture of the femur previously in use—though his remarks concerning the treatment of fractures generally, are well worthy of attention.

It being evident that the chief source of difficulty in keeping the parts of the fractured bone in proper apposition, is the tension of the surrounding muscles, causing the ends to ride over each other, Pott thought that the limb might be put into such position as would lessen this tension and thus greatly remedy the difficulty. The manner in which he hoped to effect this, may be best given in his own words. "The position of the os femoris should be upon its outside, resting on the great trochanter; the patient's whole body should be inclined to the same side; the knee should be in a middle state, between perfect flexion and extension, or half bent; the leg and foot, lying on their outsides also, should be well supported by smooth pillows, and should be rather higher in their level than the thigh; one very broad splint of deal hollowed out and well covered with wool, rag, or tow, should be placed under the thigh, from above the trochanter quite below the knee; and another somewhat shorter should extend from the groin below the knee on the inside."*

Though the excellence of much of the above is more than doubtful, it is interesting as presenting the first suggestion of flexing the limb to lessen the tension of the muscles. We are indebted to Pott in a great measure for exposing the absurdity of several ideas previously prevalent in the treatment of fractures. One is the advantage of using "roborant" and adhesive plaster, and other such applications, externally in simple fractures. He strenuously discountenances these as useless, and in many cases hurtful, but apparently unable to shake himself entirely free, he allows cere-cloth if it does not stick to or irritate the skin, and acknowledges that "at St. Bartholomew's we" use a cerate "of lytharge." Another absurd idea which he contends against, is the one above mentioned when speaking of Gooch—"the juice of the callus." This he ridicules exceedingly, and though his reasoning is erroneous in some details, it shows him to have been in possession of correct principles.

* The Chirurgical Works of Percival Pott, F.R.S., &c., London, 1763, v. 1. p. 423.

We have not cared as yet to set forth in detail the imperfections of the various apparatus mentioned, but have left them to suggest themselves to the general intelligence of the reader. A new school, as it were, commenced with Pott in the treatment of fractures of the femur, and though many of the ideas which he advocated have long since been abandoned as erroneous, some of his suggestions are acted upon to the present day. We will therefore in future follow out in turn each new principle, and tracing its history uninterruptedly down to the present time, attempt to point out perspicuously and concisely its excellencies and defects. We will thus, though nominally giving a mere sketch of the progress of an art in this direction, in reality prepare the reader to judge with discrimination which "is the best apparatus for the treatment of fractures of the femur."

The first objection to Pott's method was, that the position was very irksome, and impossible to be retained without such motion of the body as would inevitably derange the broken bone. It deprived the patient of the use of one arm—it made it difficult for him to void his stools—and finally, extension could not be effectually maintained. Yet the idea of relaxing the most powerful muscles (all, of course, could not be relaxed) was approved of and influenced White, the two Bells, the two Coopers, Mr. Earle, and many others, in the construction of their apparatus.

Mr. White made his splint of iron, hollowed out to adapt it to the form of the leg and thigh, but it being found heavy and inconvenient, a Mr. James, of Hoddesdon, improved it by constructing it of wood with moveable side splints.* J. Bell† and Sir Astley Cooper‡ were content with two boards, joined at an obtuse angle and connected by a third board at their distant ends. For greater convenience of adaptation, the two boards forming the double inclined planes were joined by hinges, and the third or horizontal board was furnished with a rack to receive their ends, so that they might be placed at any inclination desired. Side splints detached from the rest of the apparatus were used. A machine precisely similar to this was devised by Delpech, and Gerdy§ devotes to it a plate and several pages of description, but it involves no new principle and is more complicated than those of Bell or Cooper, whilst it has none of the conveniences of Earle's fracture bed.

This somewhat celebrated affair was contrived in 1806 by Mr. Henry Earle for a very bad case of fractured femur, and its invention was at once rewarded by the Society of Arts. It consisted of three inclined planes—one for the trunk, one for the thigh, and one for the leg. They were well covered with mattresses—provided with a rack to adjust the inclination, and the plane for the trunk had a piece which could be removed so as to enable the patient to pass his stools with ease and comfort. As a still further convenience this bed was provided with a frame work to hold a book or writing materials.|| Still the principle of the

* Cases in Surgery, London, 1771.

† Operative Surgery, v. ii. Principles of Surgery, edited by C. Bell, v. ii. p. 183.

‡ Surgical Essays by A. Cooper and B. Travers, London, 1820, v. ii. p. 59.

§ Traité des Bandages, p. 411, pl. ix.

|| Practical Observations in Surgery, London, 1823, p. 128.

contrivance was identical with that of Bell and Cooper, the ingenuity being chiefly exerted upon the accessory comforts rather than upon perfecting the *fracture* apparatus.

The chief objection to the latter machines is their size, and to the more perfected one of Earle the mechanical complication and expense were additional evils. The great advantage promised by them, besides the relaxation of some of the muscles, was, that the weight of the pelvis would assist in extending the limb, and concerning this Cooper has said much that has generally been approved of. Dr. Bonnett, however, Surgeon-in-Chief of the Hotel Dieu at Lyons, doubting the benefits of the demi-flexed position in treating fractures of the thigh, undertook several experiments with a view of throwing light upon this point. He broke the bone and ascertained that in fractures of the thigh the position of the lower fragment is modified by the movements impressed upon the leg and foot, and of the superior by those of the vertebral column. That when the knee is bent as usual in treating fractures by demi-flexion, the inferior fragment is pushed upwards and its point thrown towards the posterior and internal side of the thigh, and the articular extremity forwards and a little outwards. He thinks this constant, and that it occurs to a greater extent during life than after death, and therefore decidedly objects to the demi-flexed position.*

Though we have made no such experiments, and cannot even give a rational argument against the conclusions of Dr. Bonnett, we cannot feel the force of them in treating these injuries with proper apparatus, and we are confident that the contrivance of Amesbury, and all after that type, would perfectly remedy the difficulties above suggested, whilst the relaxation of the flexors, the convenience of position, and the assistance given by the weight of the pelvis, are advantages which in our estimation should not be slighted.

Amesbury's splint consists of a piece for the thigh and another for the leg, connected by a hinge, and furnished with a rod lengthened or shortened by means of a screw, answering the purpose of the third or horizontal board of Cooper and Bell. These pieces are curved to fit perfectly the under surface of the limb. A foot-board is attached to the leg piece, and the apparatus is so contrived that either by shifting the pieces or by elongating slides it can be adapted to limbs of various lengths. The thigh is surrounded by Gooch's flexible splint, and the whole secured by straps, buckles and screws, of each of which there is apparently an indefinite and most bewildering number, constituting the great and fatal defect of the machine.† Liston simplified this very much. A frame-work of two lateral rods of iron, jointed at the knee, and connected by four half hoops of the same material, constituted the foundation of his splint. Canvass or leather attached to these pieces replaced the carved posterior wooden splint. A wooden foot-piece is made fast by a thumb-screw at

* His paper is reviewed in the *Gazette Med. de Paris*, 1839, No. 38 et seq., and in the *Archives Generales de Med.*, Jan., 1840.

† Observations on the nature and treatment of fractures of the upper third of the thigh-bone, and of fractures of long standing; showing that fractures of the neck of the femur and others admit of being united, &c. &c., by Jos. Amesbury, Lond., 1839.

the desired point of the leg-pieces, which latter are furnished with a broad transverse support at the lower end, or so contrived as to screw to the bedstead if necessary. Side splints, straps and buckles are also used, but in less numbers and simpler forms than with the last.*

An apparatus much like this has been used for some years past by Prof. N. R. Smith, of the University of Maryland. In it the side pieces are of wood, but except in unimportant details it does not differ from Liston's.† To bring the history of this form of apparatus down to the present day, we will merely say that a physician of one of the neighboring States has contrived one which seems to be a conglomeration of Amesbury's, Liston's and Smith's—not an eclectic effort after the excellencies of the others, but the result of an evident desire to give them all together in wood, iron, canvass, leather and brass—straps, buckles, screws and slides—truly fearfully and wonderfully made. And, lastly, Dr. Hamilton Rowe, of New York, not making any pretensions to novelty, "got up" a set of splints upon the general plan of Amesbury, nicely carved, but shorn of three fourths of the buckles, straps and screws, and otherwise much simplified, and to these we give the palm for double inclined plane splints, advising the use of them under circumstances hereafter to be mentioned.

In all of these, the bulk is no objection, as the limb when encased in them is not increased an inch in diameter. Their weight, too, is very slight, their neatness and cleanliness unimpeachable. What is also of importance, the inclination of the thigh and leg pieces can be increased or diminished unconsciously to the patient, and the limb thus exercised by passive motion towards the latter part of the period required for a cure.

Besides these advantages in the use of this form of splint, there is another, not peculiar to it, but a characteristic of Sauter & Mayor's method, and also used with the "immovable" apparatus—that of suspending the limb from some point above the bed—the ceiling, say—at just such a height as to clear the mattress and permit free motion in every direction. The limb thus slung is not jarred by the movements of the trunk, and the muscles being allowed some little change of tension, escape fatigue. This was originally suggested in the latter part of the last century, and is given in the sixth volume of Benj. Bell's Surgery. Few suggestions have done more to ameliorate the condition of patients suffering from fracture, or have tended more, though indirectly, to increase the ultimate success of the treatment, than this simple and apparently most natural one. The height at which to suspend the limb should be such, that it may move through the arc of as large a circle as possible, and thus but slightly deviate from a horizontal position.‡

* Edin. Medical and Surgical Journal, April, 1820.

† Baltimore Med. and Surgical Journal, Edit. by E. Goddings, 1833, v. i. p. 13.

‡ To suspend the limb, get a hook which will screw into the ceiling. Take a block of wood two and a half inches long, one wide, and three quarters of an inch thick. Through the thickness of this bore two holes, inclining towards each other so as to be about two inches apart upon one side and an inch and a half upon the other. Fasten a piece of cord line to one end of this piece of wood, carry it up over the hook; bring it down into the divergent end of the upper hole, through this into the convergent end of the lower to the splint. The advantage of this little affair, which can be made in less time than it takes to describe it, is that by raising the splint and taking the tension from the cord, the block can be slid up or down upon it so as to make the limb higher or lower, but whilst the cord is tense the block is firmly held in its place, and the limb preserves the height at which it was adjusted.

We will now take the reader back to a period a little later than that of Pott for the type of another species of apparatus for the treatment of fractured thigh, which has held a high rank amongst such contrivances. It is characterized broadly and generally by its "aim to connect the pelvis and superior fragment into one piece, and the leg and inferior fragment into another," and to exert continued and forcible traction upon these as nearly as possible in the direction of the axis of the whole body. It may be said that this was the aim of Belloq, and that we should take our departure in the description of this species, from his machine. It is true that he made counter-extension against the tuber ischii, but he did this very imperfectly, and his rack-like machine seems rather to belong to the days of *glossocomii* and *trispastoi* than to an enlightened age.

We shall begin with Desault.* He used three splints: the outside one hollowed a little at its upper part to adapt it more perfectly to the convexity of the hip and thigh, and extending four inches beyond the sole of the foot, having a mortice cut into its lower end; the anterior one extending from the groin to the knee; the inner one from the perineum to the sole of the foot. These were well padded, and the necessary number of junk bags filled with chaff were used to further protect the limb. Omitting the description of the rollers, splint-cloths, &c., we only give those bandages which enter into the extension apparatus proper. One broad one carried around the body fixed the upper end of the long splint against the hip, whilst a roller, well wadded to prevent chafing, passed between the thighs as suggested by Heister, and had its ends tied firmly over the head of the splint. This was the counter-extending band, and though the deviser says that the *point d'appui* is the tuber ischii, it must be evident that the perineum, and more particularly the neighborhood of the attachment of the semi-membranosus and gracilis, will have to bear the greatest pressure. Around the foot and ankle were passed two rollers, the four ends of which served as extension straps, and were made fast to the lower extremity of the outside splint—for which the mortice above mentioned was intended to furnish a facility. The inner and anterior splints gave a firmness and compactness to the whole arrangement, the minuter details of which we could not profitably and therefore do not care to enter into.*

To this apparatus were two objections. The perineal strap was very apt to chafe—in many cases, indeed, this could not be prevented.† The extending bands being carried off at an angle, to the extremity of the splint, extension was not made in a direct line, and the outside of the foot bore too much against the splint, causing it to chafe. As other minor objections, not affecting the principles but rather the details, the waist bandage was apt to slip, and the extension bands at the foot being rollers, their pressure was not evenly and constantly distributed.

* A Treatise on Fractures, Luxations and other affections of the Bones. Ed. by X. Bichat (published in France 1811), translated by Chas. Caldwell. Phil. 1811. p. 232.

† To this the lameness of General La Fayette was owing, and not to the fracture of the thigh being badly united, as has been generally supposed. The case I have read in one of the old French Journals, but I cannot lay hands upon it now.

Boyer omitted the waist bandage entirely, and attached the foot to an iron sole well covered with soft leather, and connected to a screw, by turning which, it could be moved up or down the long splint and extension effected.*

Dr. Physick thought that with an outside splint only reaching to the hip, counter-extension was made at too great an angle with the axis of the limb and had a tendency to force the upper fragment outward; a mishap very likely to occur when the fracture is near the neck. To remedy this defect, he used a longer splint extending up to the armpit and furnished with a head like a crutch, well wadded. Immediately below this head a mortice was cut to receive the counter-extending band. Another useful suggestion was made by a Dr. Jas. Hutchinson to remedy the defect in the extension of the foot in Desault's apparatus, without recourse to the screw of Boyer. This was simply to attach a block, about one inch and a half thick, at right angles to the lower end of the outside splint on its inner side—over which block the extension bands could pass, thus bringing the traction more into a line with the axis of the leg.† With Physick's the axilla received at all times a part of the counter-extending force, and the whole of it when the perineal strap was removed to examine whether it chafed.

The only other modification of Desault's splint which it is worth while to mention, is that of Dr. J. F. Flagg, of Boston; and this we mention, not that any new principle is introduced, but because it is used with almost unvarying success in the Massachusetts General Hospital. The waistband is replaced by a broad belt buckled on, having a leather pocket for the reception of the head of the long splint. The perineal strap of Boyer is used, but in addition to it the inner splint is fitted with a head like a crutch, well stuffed, and is made to exert part of the counter-extending force. Through a cross piece morticed into the lower end of both pieces, a screw passes, to which the foot straps are attached, and by turning the screw traction is effected.

The value of Desault's principles as used under the last-mentioned improvement, as well as in almost all of this type, may be very readily estimated. The apparatus is simple, cheap and readily obtained or manufactured. It is not bulky or heavy. Traction is sufficiently strong, can be easily tempered, and is made in the proper direction. By a judicious distribution of the compresses and junk bags, the limb is uniformly and well supported. So much for the favorable view. The unfavorable points are three:—The position of the whole body, when an apparatus of this kind is applied, is very constrained, and of course irksome. The perineal strap is very liable to chafe and ulcerate the parts against which it is applied, particularly with corpulent persons and with females. It is also apt to become foul from contact with the excretions. This summary exhibits a balance in favor of this splint, our views as to the application of which will hereafter be given.

An apparatus constructed upon another plan, for producing extension and

* *Traité des Maladies Chirurgicales, &c.*, Paris, 1822, v. 3, p. 302.

† *Institutes and Practice of Surgery, &c.*, by Wm. Gibson, M.D., Phil. 1824, v. 1. p. 441.

counter-extension, has been frequently confounded with that of Desault, but it will be seen that the principle is different. We mean that of Hagedorn. Even before Desault wrote, Bruninghausen, a German surgeon, treated fractures of the thigh by confining both feet together, making the sound limb answer the purpose of a splint.* This was highly ingenious, and if he could have kept the pelvis from *giving* towards the injured limb, it would have answered very well; but yielding to the influence of pain, the pelvis would cant, and of course permit the fragments of bone to override each other.

This defect Hagedorn attempted to remedy in the following manner. A splint, reaching from the crest of the ileum to just below the foot, had, strongly and stiffly morticed at right angles to its lower extremity, a board large enough to receive the soles of both feet, and perforated with many holes. This splint was firmly bound to the outside of the sound limb throughout its whole length and to the hip. The foot of the same side was then made fast to the board by an ankle band, with straps passing through the holes above mentioned. The fractured limb was lastly extended, and the foot of that side made fast along side of the other—the limb itself remaining without dressing or bandage.†

Finding that even with Hagedorn's splint the pelvis could not be kept perfectly firm, Prof. Gibson, of Philadelphia, modified it by using two splints, one on each side of the body, and these instead of reaching to the hip were extended to near the axilla.‡ This, we may take for granted, remedied the defect, but to look at the picture illustrating his apparatus is sufficient to impress one at once with the objections to it. The man looks as if he were getting his coffin made by instalments, and was already fitted with it from his arms down, and it is evident that his position must be irksome to an almost insupportable degree, to say nothing of the difficulty of attending to personal cleanliness whilst the patient has so much of him encased in wood and bandage. Samuel Cooper thinks Hagedorn's "perhaps the best apparatus ever invented for fracture of the neck of the thigh-bone;" and so with a constantly careful and observant surgeon it might be, but we must beg leave to doubt its efficacy and certainly its *peculiar* excellence as a means for the majority of practitioners.§

The next method of treating fractures of the thigh has been designated by the title "the suspensory method," the history of which is as follows. In 1812 Dr. Sauter, of Constance, published a work|| in which he advocated the treatment of fractures by simply suspending the fractured limb upon a horizontal platform sufficiently provided with cushions—the limb being unconfined by splints, but merely kept in place by enough handkerchiefs or other bandages to effect that object. The advantage promised by this means, was, that from the mobility of the limb,

* His work was first published at Wurtburg in 1789, 8vo. with plates. It was translated into Italian by Paletta, but never into English.

† His work was published in Leipzig in 1808, 8vo. 2 plates. I have not seen it.

‡ Op. citat., v. i. p. 445.

§ First Lines of the Practice of Surgery, Phil. 1836, v. ii. p. 290.

|| Instructions pour traiter sûrement, commodément et sans attelles, les fractures des extrémités, &c. Traduit de l'Allemand, par M. Mayor. Constance, 1812.

movements of the body did not produce any jar or shock that would displace the fragments of the fractured bone, and consequently the clumsy and annoying apparatus of bandages and splints was unnecessary, and all the inconveniences entailed by their use avoided. In spite of the advantages which the original suggester of this mode of treatment thought would prove so obvious, treatment of fractures by the "planchette suspendue" had excited but little attention when Dr. Mayor adopted the idea, and having already translated Dr. Sauter's work from the German, he published in 1827 at Geneva his own views.* His book shows much originality, laborious research and praiseworthy industry, but we cannot help feeling, upon its perusal, that the author has permitted himself to be engrossed too much with one idea, a not uncommon fault of even superior minds. To finish the history of Dr. Mayor's exertions up to his last publication upon this particular subject, in 1838 he published his third and last (I believe) work,† in which, in addition to his advocacy of "Hypothenarcie," he recommends many simple substitutes for the more complicated apparatus now in use, particularly of handkerchiefs for roller bandages.

We will give a more detailed description of Dr. Mayor's apparatus. The simplest contrivance, and the one which may be taken as the starting point for other devices having the same object, or the type upon which his other fracture apparatus are formed, consists of a plain piece of plank, say an inch thick and of size proportioned to the limb to be placed upon it. A cord is attached to each corner by passing through a hole, and being knotted on the under side, and by these four cords united at the height of three feet into one, the board is suspended. Upon this board a cushion is laid for the protection of the limb, which is kept in place by two or more handkerchiefs encircling both it and the board. The above, as we have said, is the simplest form of Mayor's apparatus, but it embodies every principle he insists upon.

For the more complicated forms, we can conceive of the board having holes cut in different parts of it, or having upright pieces tenoned into the edges of it, in order to vary the direction of lateral traction, or make it more efficient by passing the ends of the handkerchiefs through the one or around the other. The plank, which is hard and unyielding, is replaced by an outline frame-work of tough wood or of steel rod, filled across with wire, the elasticity of which would obviously tend to lessen the irritation of the support.

Still further—in fractures near articulations, or upon any other necessity, two or even more of these frames may be joined together at the end, either with a flexible or immovable joint. For the thigh the particular apparatus is as follows. A platform, for the thigh alone, may be used, or one extending straight from the ischium to the heel—or one composed of a thigh and leg-piece united at an angle, the latter much resembling some of the apparatus we have already described. With

* *Memoire sur l'Hypothenarcie ou sur le traitement des fractures, par la planchette.* Geneva, 1827.

† *Bandages et Appareils a pansements, ou nouveau system de deligation Chirurgicale, &c. &c.* Paris, 1838, 8vo. avec atlas.

these, straps well padded and furnished with buckles are used to keep up the necessary extension. For fractures of the neck of the thigh bone three contrivances are recommended—a thigh-piece alone, a leg-piece alone, or a popliteal support, "*selle poplitée*," somewhat resembling a small saddle, answering to the double inclined plane, but not furnishing support over so large a surface. To these the objections are obvious—too many muscles being not only left at liberty to exert themselves, but being excited to exertion in order to give that steadiness to the limb which might be furnished by the splints.

Such is the apparatus of Mayor, the advantages and defects of which are almost as evident as the contrivance is simple. We can say that wherever it is sufficient to achieve our designs, nothing could be simpler, cheaper, less troublesome or more comfortable, and in fractures of the leg unattended with complication, but a trifling modification would induce us to give it a hearty approval. When, however, we take into consideration the nature and extent of the difficulties we have to contend with in treating a fracture generally so unfavorable from its obliquity, and surrounded by such powerful muscles as that of the femur, we could not feel safe in employing it without such alteration as would take from it some of its most characteristic peculiarities. At the same time we would not wish to appear to doubt the sincerity of M. Mayor in his assertion that he has treated many cases of fracture of the femur, with perfect success, but can readily conceive that cases simple in their nature, and treated with great care and constant attention, might often eventuate well.

In spite of the admirable zeal of M. Mayor, his method seems to have made but little progress in the good opinion of the profession, and its application is still comparatively limited to a very few, except under such modifications as would scarce permit its originator to recognize it.

[To be continued.]

THE "EPIDEMIC" IN CENTRAL NEW YORK.

[Communicated for the Boston Medical and Surgical Journal.]

THIS disease, which has prevailed so extensively throughout the country under the names of "epidemic fever," "black tongue," "typhoid erysipelas," &c., made its appearance in this section about three years since. Commencing in certain districts, raging for a few months, and then gradually abating as it appeared in other places, it has travelled over a great part of central and western New York. In some localities it has assumed a malignant and fatal character, attended with erysipelatous inflammation and typhoid symptoms. In others it has been of a milder form, distinguished by a cynancheal affection of greater or less severity. Hence the different appellations it has received. By some the term "black tongue" has been applied to all cases, whether this symptom were present or not; and by others, "epidemic," and "typhoid erysipelas." The former I have rejected, not only as unscientific, but as

merely expressive of a symptom frequently observed in fevers of a malignant character; and the latter appears to me equally inappropriate, at least in a majority of cases.

The constitutional symptoms which characterize an attack of this epidemic, closely resemble those of our ordinary remittents, except in their much greater diversity—a diversity which pertains to its whole course, as if it were not under the control of those laws which regulate the progress of most febrile diseases. In some instances it is ushered in by a severe rigor, succeeded by vigorous re-action. In others the premonitory stage is protracted. The different stages, however, are seldom well defined, and the remissions and exacerbations are irregular. Sometimes the fever is quite ephemeral, and terminates in a critical evacuation. But more generally it advances for an indefinite length of time, and without any marked crisis terminates in gradual convalescence or death. The nervous symptoms throughout the course of the disease are very conspicuous; the pulse exceedingly variable; the tongue, at first covered with white or yellowish fur, soon becomes dry and dark. Nausea and vomiting are common at an early period, and not unfrequently diarrhoea, with delirium, tympanitis and colliquative discharges in the latter stages. Some of the local symptoms are more diagnostic of the epidemic. Catarrh, more or less severe, appears before the constitutional disturbance is manifested. The fauces soon become inflamed, the tonsils enlarged and painful, tongue swollen, &c. Extensive suppuration of the tonsils frequently takes place; and in some of my cases, abscesses have formed in different situations about the throat, requiring an external opening and giving exit to large quantities of matter. Erysipelatous inflammation about the head, face or extremities is also common; sometimes confining itself to a single spot, sometimes shifting from place to place, and sometimes spreading over a large extent of surface. This inflammation has appeared among the first symptoms, but usually not until two or three days after the development of the fever, and often much later. When it confines itself to superficial parts, and the constitutional disturbance is moderate, desquamation takes place, and the patient generally recovers in a few days. But when it attacks internal organs, or when it involves sub-cutaneous structures terminating in suppuration or gangrene, the case becomes one of great danger. Some cases have occurred in my practice in which the inflammation began with a vesicle upon the hand, spread rapidly over the fore-arm, assumed a phlegmonous character, and terminated in suppuration and sloughing of the cellular tissue. I have also seen some cases in which it has attacked and terminated in gangrene and death in a few hours. These, however, were patients of relaxed and vitiated habits.

The disease seems to attack principally adults; those whose constitutions have been enfeebled by age, intemperance, or previous disease, being most obnoxious to it. Among puerperal women its ravages have in some instances been truly frightful. In cases of this kind that I have seen, the disease has appeared in the form of puerperal fever, coming on simultaneously with the re-action after delivery, and generally terminating fatally.

The striking feature of this epidemic, and what constitutes its greatest danger, is the extreme proneness to visceral inflammation and early prostration of the vital powers. The brain, the respiratory or the digestive organs, if not primarily affected, are almost sure to suffer at a later period. Cerebral irritation is generally a prominent symptom in the complaint, and when inflammation has attacked this organ it has usually made its appearance in the advanced stages. Pulmonary and hepatic inflammations also supervene at any period, sometimes setting in with the re-action after a collapse.

In some instances where the re-action is not vehement or the local affection very obvious at first, gastro-intestinal inflammation supervenes. The nervous energies become exhausted, and the patient sinks with tympanitis, involuntary discharges, subsultus tendinum, delirium, coma and death, almost before such an event can be anticipated.

With regard to the origin of this disease, and how far it may depend on miasmatic influence, there is some diversity of opinion—a subject, to enter upon which will extend too far the limits of this article. Suffice it to say, according to my observation, it has not confined itself to, nor indeed has it assumed greater malignity in low and marshy districts, but has appeared in its worst form in situations remote from the ordinary sources of malaria—situations that have hitherto been remarkable for their salubrity and free from miasmatic diseases.

As to its contagious character, I will only say that attendants and those most exposed to the sick room, are very liable to it. In some instances whole families have been successively attacked, as have domestics also, some of them after returning to their homes at a distance for the purpose of avoiding the danger.

Treatment.—In this as in other affections, the practitioner must be governed by general principles, and guided wholly by the indication present, keeping in view the peculiar tendencies of the disease. In young and robust subjects, where the re-action was vigorous, and especially if there were symptoms of visceral inflammation, I have used the lancet, bleeding in all cases until a decided impression was produced, but seldom repeating the operation. Some have remarked that this impression is obtained by a very limited abstraction; but such does not accord with my own observation. In old or debilitated subjects, and even in the robust after the disease is much advanced, I consider venesection hazardous. A gentle emetic in the commencement generally proves beneficial; also one or two cathartics sufficient to evacuate the bowels freely, in the early part of the complaint. For this purpose I have used six or eight grains of calomel, followed by a small dose of castor oil. When this is omitted or postponed to a late period, the tendency to gastro-intestinal irritation with its attendant symptoms is much greater. After the above means, mild aperients, enemas, sudorifics, anodynes, &c., according to the indications, with a mild and unirritating diet, constitute the general management. Tonics and stimulants are often indispensable, but require to be administered with great caution, as they are apt to re-excite inflammatory action. Mercurial pyalism at an early period has

in many instances been followed by very happy results. This has been particularly marked in some cases where pulmonary or hepatic inflammation existed. Antimonials and drastic cathartics I have avoided on account of the mucous irritation almost invariably present.

In topical remedies much reliance is placed; sinapisms, blisters, cups, leeches, &c., according as they are indicated, in the vicinity of the local affection. As an application to inflamed surfaces, I have used a solution of the sulphate of iron with very satisfactory results—varying the strength according to the susceptibility of the part. Blisters are also used to arrest spreading inflammation, but for this purpose the tincture of iodine has answered my expectations better. When the tonsils are much inflamed, free scarification and the nitrate of silver are the usual remedies, with external stimulating applications to the throat. When suppuration occurs in any part, it should be treated upon general principles.

Summer Hill, N. Y., Aug. 8, 1845.

H. O. JEWETT, M.D.

EXCISION OF A FIBRO-CARTILAGINOUS TUMOR FROM THE NECK.

[Communicated for the Boston Medical and Surgical Journal.]

ON Wednesday, June 26th, 1844, Ashley M. Rose, an athletic seaman, of medium stature and full muscular development, 34 years of age, presented for examination, at the request of Dr. N. Ruggles, of this town, a tumor, of which he gave this account:—at 12 years of age he perceived a small, hard substance, behind the lower part of the left ear, in which he did not observe any remarkable change, until about his 17th year; that from that period until the present, he had noticed a constantly increasing enlargement, particularly rapid during his recent voyage, including the last three years; that he now experienced so much pain and inconvenience from it, that he had determined to submit to its removal, should an operation be deemed advisable.

On careful observation, the tumor was found to be hard, unyielding, and occupying parts of the parotid, auricular, mastoid, sterno-mastoid and carotid regions (of Blandin), pushing upward and outward the lobe of the ear, extending from the meatus auditorius downward nearly three inches, and from a point half an inch behind the facial artery, at its crossing of the jaw, three inches posteriorly; it projected so much as to induce him to wear his hair long, to conceal the deformity. The tumor was pyriform, apex downward, slightly mobile, covered by a skin highly vascular, and presented neither pulsation nor fluctuation. Dull, heavy pain was experienced in the tumor and neighboring parts, together with an occasional darting towards the shoulder, greatly increased by vigorous exertion, as rowing in a whale boat, accompanied by a permanent uneasiness in the entire left side of the head. The patient could account for the existence of the disease, only by his having been pinched behind the ear, when a boy, by his master, as a punishment.

An operation having been decided upon, as judicious and feasible, it was on Monday, July 1st, performed in presence of Drs. N. Ruggles,

Isaac Thompson and J. B. King. A crucial incision was made over the middle of the tumor, as large as possible, without wounding the external jugular and the nerve of the seventh pair. On raising the superior, anterior flap, this nerve, coming clearly into view, was carefully dissected from the tumor, although at the cost of great suffering to the patient. Dissecting down to the sterno-mastoid, I found the tumor extending inward and backward, whilst, on its superior face, I discovered that it rose above the lower edge of the jaw, and directed its course inward there also. The apex of the tumor, pointing downward, also had a tendency inward. Enlarging the incision, in a line parallel with the jugular, and an assistant drawing aside this vessel, I attempted to dissect from below, upward, and succeeded in freeing the tumor from its attachments beneath the sterno-mastoid, and partially within the lower jaw. I now found the disease intimately adherent to the parotid gland, and being unable to detect any line of separation, I cut away so much of the gland as seemed liable to be in any wise diseased, and this, too, without any very profuse hemorrhage. At this stage of the operation, I became satisfied, from the number of small arteries in the tumor, already secured by torsion, that large arteries, as yet uninjured, nourished the disease, and requesting Dr. Ruggles to compress the carotid, the pulsations of which were very strong in the bottom of the wound, I cautiously separated the tumor from its remaining attachments. A profuse hemorrhage immediately followed, which, however, was speedily controlled by pressure on the carotid, and the introduction of a sponge; three arteries, of considerable size, were secured by twisting with the artery forceps of Goulding. The carotid sheath was exposed, at the bottom of the wound, for at least two inches.

The wound was dressed with sutures and adhesive straps, and compression made by a simple roller, to bring the surfaces in contact. The patient, who had borne the operation with heroic firmness, declared himself very comfortable, and was placed in bed and ordered gruel and cold water in small quantities.

At evening, pulse 96, full and strong. Bandages considerably stained, but no serious hemorrhage. Strict confinement to the supine position, cool drinks and low diet.

July 2d, A. M.—Feels pretty well; some headache; pulse 96; bandages as last evening. R. Magnes. sulph., ʒjss . Low diet. Wet bandages with alcohol.

Evening.—Pulse full and strong, 100. Salts have operated freely. Pain in head. Begins to feel uneasy everywhere. R. Venesection ad ʒ xvi . Relieved; pain and uneasiness gone.

3d.—At morning visit pulse 76; no pain anywhere. Wishes to rise. Continue low diet and cold drinks.

At 10, A. M. removed the dressings. Found the wound healed, except from ear to the crucial line. No hemorrhage. Dressed with lint, smeared with lard. Continue alcohol.

In one week and six days the patient was discharged, and in four weeks was perfectly well, the superior part of the wound having, for a time, discharged a bloody serum, and finally healed.

When I last saw the man, in October or November, the face was perfect in every function, the muscles entirely under the control of the will, the parotid exhibited no indication of any lesion, the neck had resumed its fair proportions, apparently free from all disease, and the patient was exempt from all the pains, to which, for years, he had been subject.

The tumor, when drained of blood, weighed two and a half ounces, was pronounced by all the medical gentlemen present, fibro-cartilaginous, and presented, on its superior face, numerous tuberculated prominences; it did not lead us to suspect malignancy, but rather to conclude that it caused pain, by its pressure on neighboring nerves, and interference with muscular action.

The patient stated that he had shown the disease to surgeons, in various parts of the world, but had been advised to avoid an operation. Not coinciding with such reputed opinions, I thought it proper to operate as stated. To the gentlemen, whose assistance was as opportune as judicious, I would render my thanks, not omitting my gratitude to Him, without whose aid we can do nothing.

BENJ. H. WEST, M.D.

Nantucket, Aug. 11th, 1845.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, AUGUST 20, 1845.

Essay on Compound and Complicated Fractures.—Messrs. Crocker & Brewster, of this city, have published Dr. Walker's Address before the Medical Society, making a text of 45 pages, followed by 56 pages of cases of compound and complicated fractures. Cases 1 to 23 are the foundation on which the discourse was founded. The publication is now before the medical community, and those who may wish more fully to understand the claims of the old surgeons, have the opportunity. Dr. Walker exhibits energy of character and power of discrimination in this essay, creditable to the professional reputation of New England. He neither underrates the skill of living operators, nor over-estimates the services of those who are dead. On the question of immediate or deferred amputation in cases of compound fracture, where it is decided the limb cannot be saved, Dr. W. unhesitatingly objects to the delay which has been recommended by some authors. A few extracts on this point are all that we can find room for this week.

"All the circumstances of a given case having been duly considered, and amputation deemed indispensable, this most important question presents itself:—shall such operation be performed immediately after the accident, or at some future time? Speaking on this subject, Mr. Bromfield, an eminent English surgeon of the last century, says: 'As I would not mislead in the case of compound fractures, I therefore declare from experience, that when things are so circumstanced that the operation is unavoidable, the sooner it is done, the greater will be the chance of saving the person's life.'

"Again, Wiseman, a man of great ability in his profession, and who had seen much service, both in naval, army, and civil practice, says: 'But it was counted a great shame to the surgeon, if that operation was left to be done the next day, when symptoms were upon the patient, and he spent with watchings, &c. Therefore you are to consider well the member, and if you have no probable hope of sanation, cut it off quickly, while the soldier is heated and in mettle. But if there be hopes of cure, proceed rationally to a right and methodical healing of such wounds.'"

"J. L. Petit speaks of the same advice being given him when a young man (1693), by a distinguished surgeon of his day, whom he consulted for a patient under his care.

"Ambrose Paré applies the same doctrine to the dilatation of gun-shot wounds: and Le Dran announces his judgment in the following words. 'Whenever, in case of a gun-shot wound, the surgeon foresees the indispensable necessity of amputation, he should do it at once.'

"While such was the opinion of these distinguished men, the French Royal Academy of Surgery, in the year 1754, proposed the following question for a medal: 'In what cases is it necessary to perform amputation immediately, and in what to defer it?' The prize was awarded to M. Faure, a military surgeon, for an essay which maintained that amputation should only be performed after the subsidence of the first symptoms, and the establishment of suppuration."

"Some time subsequently, John Hunter and O'Halloran, in England, embraced the same views."

"When we remember that Hunter, in England, undoubtedly stood at the head of his profession, both in military and civil practice, that Faure enjoyed a high reputation from the great success which, he alleged, had crowned his efforts, that he was honored by the medal of the Academy, and still more by the approbation, countenance and friendship of the distinguished surgeons who constituted that learned body; when two such men, under such circumstances, unite in recommending one course of practice as safe and proper, and at the same time tell us, that whenever that course is deviated from, the most disastrous consequences ensue; we cannot be surprised that their doctrines should exercise great influence over the opinions and the practice of the civilized world. Such has been the case here; and I believe I may state, that the practice of deferring amputation, when made necessary by casualty, until after the subsidence of the first symptoms, was enjoined upon the military surgeons of Europe, and generally approved by distinguished men in the civil exercise of the art, from the days of Faure to the time when, in France, Baron Larrey, and in England, Dr. Hennen and Mr. Guthrie, established the fact upon the fullest evidence, that both Faure and Hunter were in error, and that where amputation is necessary in consequence of gun-shot wounds, and, I may add, of other casualties, such operation ought to be performed at once, or within twenty-four hours from the receipt of the injury; that when amputation is practised before the access of the consecutive symptoms, it may be done with but little comparative danger; that when it is done after the appearance of such symptoms, and before suppuration is fully established, fever allayed, and the system restored, as it were, from its influence, the danger is urgent, and the result usually disastrous; finally, that if delayed until after all these symptoms have given way, swelling subsided and suppuration

has been established, a better chance of recovery may exist; but still, this chance is much less than if the operation had been done immediately on the receipt of the injury."

Shampooing the Head.—This is a new operation, which the barbers of Boston accomplish with peculiar adroitness and success. The mass of people, however, know nothing of the process, nor do they correctly understand the object in being shampooed; the art is, therefore, not properly estimated, nor the important advantages resulting from it appreciated.

A refined civilization has brought with it a train of physical evils, which it is the province of science to control or subdue. Our tight hats, warm rooms, closely fitting caps, silk night caps from which the perspirable matter cannot escape, by their combined agency, in connection with other influences not always easy to define, bring off the hair prematurely and turn it gray sooner than personal vanity is willing to exhibit such evidences of decay. And this is not all; the skin is actually in a low state of disease, the effects of which are recognized in the accumulation of dandriff—the desquamation of the epidermis. The bulbs of the hairs are inflamed, also, from the same cause, and from year to year the hair it degenere rates and becomes thinner, not unfrequently ending in baldness. On all that part of the head which the hat does not cover, viz., the back side, between the ears, and on the temples, the hair generally remains to extreme old age, however much the vertex may be denuded. If females wore equally tight coverings, their hair would probably suffer very much in the same manner; but their light, airy bonnets admit of ventilation, and hence a bald-headed woman would be a phenomenon. Who ever saw a bald Indian? We have had an opportunity of seeing various tribes, in all the freedom of unrestrained savage life—but a sparse head of hair was never noticed. Atmospheric exposure conduces to the luxuriance of the hair and a healthful condition of the scalp. There is another cause of the falling off, or rather breaking off of the hair in combing and brushing, not the effect of disease at the root, but the destructive burrowing of a microscopic insect—a living, invisible moth, eating its way from one stalk to another, like the Hessian fly in a field of wheat.

Shampooing is a partial if not perfect remedy for two or three of the common misfortunes to which many are incident, of the character here enumerated. Besides, the very art, of itself, is refreshing, invigorating, and admirable in various respects, as in headache and neuralgic pains. We hope the custom of having the head shampooed will become as general as that of being shaved, for it equally is a part and parcel of cleanliness. Ladies would derive quite as much benefit from the turmoil the barbers raise in the hair with their odoriferous soaps and well-plied brushes, as the rougher specimens of humanity; and we hope to see those of them who exert an influence in society, giving the example of their own submission to the plastic hands of the new school of shampooers.

But before leaving the subject, it is essential that the barbers should be reminded that this operation might become a source of certain and largely increasing profit, by asking only a reasonable fee. A dollar is a frightful price, that would keep a whole city out of the best shop in christendom. Why should they ask so much for doing a service not materially longer or more laborious than shaving? Only offer encouragement to the moving

masses in these crowded streets to enjoy a luxury, scarcely inferior to a bath, and really very important to the growth, firmness and healthful condition of the hair, and the whole craft would thrive beyond all former precedent.

Elementary Chemistry.—This is an unpretending, but decidedly valuable treatise, on the elements of chemistry, theoretical and practical, by George Fownes, Lecturer on Chemistry at the School of Medicine in Middlesex Hospital, &c., with numerous illustrations—enlarged with notes by Robert Bridges, M.D., a professor in the Philadelphia College of Pharmacy. The work bears examination, and will be found, it is thought, capable of creating, or rather awakening, a new interest in the subject in those who give heed to its instructions. Chemistry lags sadly in most of the medical institutions of the country, and unless some positive effort is made to give it a higher position and a better rank, the practitioners of physic, a few years hence, will know even less than at present. It is useless for Dr. Webster, of Cambridge, or Dr. Draper, of New York, to prepare text-books, and exert themselves to elevate the science of chemistry, so long as there is so much indifference on the part of the faculties of medical institutions. Dr. Bridges has a perfect idea of what is needed, and the preparation of this excellent guide should have the countenance of all public instructors, and especially those of medical students.

The publishers are Messrs. Lea & Blanchard, Philadelphia, who never engage in any second-rate work. Copies may be found at Ticknor & Co.'s, Boston.

St. Louis Magnet.—Whether the new periodical commenced at St. Louis, with the above name will powerfully attract gudgeons, remains to be ascertained. It is lamentable that any two men of ordinary capacity, like Messrs. McNair & Slafter, the editors, are willing to engage in such a cause as that of animal magnetism. But when they gravely discourse about the medical effects of that non-existing agent, and glorify the names of persons who would not bear a microscopic examination, much less a clairvoyant inspection by one of their own cheating subjects, it is necessary to watch their movements. For the first time we have ascertained the important fact that "Dr. Dodds's talents are so well known in the United States, that encomium from us [Messrs. McNair and Slafter] would be superfluous." Through this same Magnet, it is declared that the "*Columbian Magnetic College* is located, for the present, at No. 42 Billerica street, Boston." What an eligible place for a public institution! "It shall be the duty," it is stated, of the "Presidents and Professors"—Gilbert and Dodds being the first pair of presidents—"to grant diplomas to applicants, who, on examination, shall be found qualified, medically and physically, to become public lecturers on this science, and mesmeric physicians, so that the public may hereafter be guarded against imposition." Save us from such abominable hypocrisy as this, ye destinies! If the President Gilbert here referred to, is the Dr. Gilbert of our acquaintance, the sooner he gets out of such company the better it will be for his reputation. Low devices for pocketing money, based on the credulity of a portion of mankind, who pay largely for being genteelly duped, stick to one's reputation through life, with the tenacity of tar to a garment.

Eighteen Cases of Intermittent Fever treated with Salacine in the Charity Hospital, New Orleans.—The object of these observations is to ascertain the virtues of salacine, and to what extent it may be relied on as a substitute for quinine. In the vicissitudes of commerce and of governments it might happen that we should be cut off from the supply of this valuable medicine, which is entirely of foreign growth. It is, therefore, very desirable, if possible, to discover a substitute for it at home. By a communication which recently appeared in the Washington "*Union*," we are informed that the British Government are now endeavoring to acquire a monopoly of Peruvian bark. If they succeed, the price of quinine will probably be greatly increased. In view of this, we learn that the United States Army Medical Service has determined to make an extensive trial of salacine, the active principle of the willow bark. We have thought that the fine opportunities presented by this large Hospital should not be neglected in this investigation. Dr. Fenner has now tried the salacine in eighteen cases, but deems the number quite too small to justify a report. So far it appears greatly inferior to quinine. Its virtues are somewhat enhanced by combination with piperine. As the article has been very little used within the last few years, the quality may not be first rate. It is now dearer than quinine, on account of the larger doses required, but if it be found to answer as well in any dose, it can be made cheap, as the supply of willow bark in our country is inexhaustible. A report will be made at a future time.—*New Orleans Medical Journal*.

The Office of Coroner.—Does it not seem strange, that the custom so generally prevails throughout the country, of appointing gentlemen to the office of coroner, who, although otherwise qualified, are not medical men? It seems to us, that, could the public duly appreciate the functions of the coroner, and how often the life of the criminal depends upon the investigations of that officer, as well as the due administration of justice, none other than the most thoroughly-educated and practical medical man would ever be selected to attend to its duties. On the contrary, we see the most interesting, intricate, and important questions, often involving character and life, wholly dependent upon the examinations, exertions and decision of men totally ignorant of everything connected with those questions. This great public evil has, for years, existed in our city, and calls loudly for the profession to awaken the public mind to a proper consideration of the subject.—*Missouri Med. Journal*.

Starving to Death.—Mr. Headland detailed to the Medical Society of London, the particulars of a case in which a gentleman, 26 years of age, usually in good health, having complained of a "feverish cold," which, however, did not prevent him from following his usual employment, that of a solicitor, was advised to refrain from all kinds of support and live merely upon water. He acted on this advice, and for eleven days tasted no kind of food, with the exception of a teaspoonful of beef-tea on the tenth day. He sunk on the twelfth day, having for a few days before been affected with discharge of blood from the bowels. The day previous to death, Dr. Rook and Mr. Headland were called to see him, and found him emaciated in the last degree. There was no symptom whatever of fever; pulse 80; tongue clean. It was attempted to introduce nourishment very carefully, but the attempt failed, and the patient sunk.

He had complained during the last few days of extreme hunger and weakness. On examination after death, the only fat was found in the anterior mediastinum. The linea transversalis of the recti abdominis could be seen through the skin. The brain was remarkably hard, and gorged with blood; the upper lobes of the lungs contained quiescent tubercles; the intestines were shrivelled, and in part ulcerated; the gall-bladder distended, and the parts surrounding it tinged with its contents; the muscles were of a bright-red color. The case was considered important by the author, as illustrative of the morbid effects of starvation, for such he considered it to be. He attributed the *post-mortem* appearances to this cause. He referred to the contradictory statements of authors respecting the brain in cases of starvation; for whilst some had recorded this organ to be gorged, others had described it as full. The gall-bladder had been invariably found distended.—*London Lancet*.

Dysentery.—We have had within the last two weeks several cases of this disease. In the first case, there were constant characteristic discharges from the bowels, with considerable tenesmus. The attending fever was what is generally termed typhoid. Indeed the disease appeared to be typhoid fever (*dothien enterite*), with the addition of inflammation of the mucous membrane of the colon and rectum. Dr. Pope has recently examined *post-mortem* some quite similar cases, and reports disease of the glands of Peyer. One patient died under the ordinary anti-dysenteric treatment; that is, a few grains of calomel and Dover's powder, given according to the number of the dejections; astringents; blisters to the abdomen, and gum water. A *post-mortem* was not obtained, which is to be regretted.

In two similar cases a different course has been pursued. The abdomen has been blistered and gum water given, but not the calomel, opiates and astringents, except so far as the following preparation is opiate and astringent: R. Sulphat. quinia, gr. x.; acid. sulph. fort. dr. i.; tinct. opii., dr. jss.; aquæ puræ, oz.—M., a teaspoonful in a wineglass full or more of water as often as the bowels act.

This has been the only medicine given, and the patients on this morning, June 17, after having taken it during four days, are evidently convalescent.—*St. Louis Medical Journal*.

MARRIED.—In this city, by Rev. Dr. Lowell, Francis A. Willard, M.D., to Miss Susan L. Delano, both of Boston.

DIED.—At Chelmsford, night of 9th inst., in a fit of apoplexy, Dr. Paul Kittridge. He had been in Lowell between 9 and 10 o'clock, and at 11 was a corpse.—In Kensington, N. H., 10 inst., Dr. Joseph Otis Osgood, a graduate of Harvard University, in the class of 1804, aged 63.—At Sunbury, Delaware Co., Ohio, August 1st, Edward Rowland, M.D., a native of Windsor, Ct.; he graduated at Amherst College, pursued his professional studies at New Haven, was afterwards employed as assistant physician in the McLean Asylum at Charlestown, Mass., and subsequently practised medicine at East Hartford, Ct., whence he removed to Ohio in 1840.

Number of deaths in Boston, for the week ending Aug. 16, 62.—Males, 37; Females, 25. Stillborn, 3. Of consumption, 9—disease of the bowels, 13—cholera morbus, 3—inflammation of the bowels, 2—typhus fever, 3—inflammation of the lungs, 1—dropsy on the brain, 2—infantile, 6—dysentery, 1—disease of the liver, 1—cholera infantum, 8—teething, 2—abscess, 1—diarrhoea, 1—dropsy, 1—lung fever, 1—mottification, 1—croup, 1—marasmus, 1—smallpox, 1—old age, 1—apoplexy, 1—accidental, 1.

Under 5 years, 33—between 5 and 20 years, 6—between 20 and 60 years, 16—over 60 years, 2.

Case of Extensive Inflammation of the synovial membrane of the Knee-joint terminating in suppuration, without inducing ulceration of either the hard or soft textures of the Joint. By SAMUEL TYLER, M.D.—I was called on the 29th of October, 1844, to visit a patient 15 years of age, laboring, as it was then supposed, under a scrofulous affection of the knee-joint. Upon inquiry into the history of the case, I learned that some six months previous the patient had given the limb a severe twist, whilst running over rutty, uneven ground. Finding the joint excessively swollen, the leg so contracted as to render it almost impossible to place the foot upon the ground by force, I proceeded to treat the case in the following manner. Commencing with the application of a blister which surrounded the joint, which was afterwards kept discharging by the use of warm poultices, I gave on each alternate day the favorite purgative of Dr. Physick, jalap and cream of tartar, in doses sufficient to procure free evacuations.

Under this treatment the general system improved somewhat, but the joint continued to swell, when on the 16th of November I made a free incision upon the inner side of the joint, evacuating at least one quart of pus. A continual discharge was kept up from this opening until the 29th of December, when I made use of "Chase's apparatus" to overcome the contraction of the limb, which was perfectly effected in less than three weeks' time, leaving the patient with a limb perfectly straight, and entire mobility of the joint.

I consider the great peculiarity of this case to consist in the fact, that where there should be so excessive and long continued inflammation of the synovial membrane, it should terminate without inducing ulceration of either of the soft or hard textures of the joint.—*American Journal of Med. Science.*

Phthisis, Influence of Employment on.—From an elaborate and valuable paper by Dr. Guy on the influence of employment in the production of phthisis, the most important conclusions to be drawn are: that the ratio of cases of pulmonary phthisis to those of all other diseases is highest, both in the male and female sex, among those following in-door employments, and in the case of men, varies inversely with the amount of exertion, being highest where there is least exertion. Neither a constrained posture, nor exposure to a high temperature, nor a moist atmosphere, appears to have any marked influence in inducing consumption. The ratio of pulmonary phthisis to all other diseases is highest among men exposed to the inhalation of dust, and high among the intemperate. The age at which the disease occurs is early in proportion as the occupation is such as to present a high ratio of cases. The practical inference deducible from these observations is, that the predisposed to phthisis should choose out-door occupations, and among in-door employments, those entailing most exercise, and that they of all others should avoid intemperance and the inhalation of dust. Dr. Jackson (New England Quarterly Journal of Medicine and Surgery, July, 1842), however, in his analysis of 604 dissections of persons dying of all diseases, in the course of ten years, in Boston (U.S.), says that intemperance certainly does not appear to develop phthisis, and that of 35 drunkards, 26 presented no trace of tubercle.—J. R. BENNETT, in *British and For. Med. Review.*